April, 2011

INSTALLATION INSTRUCTIONS
condensate trap for high efficiency separated combustion unit heaters for model PTC

⚠ WARNING

Vent System and Unit Condensate Drain must have traps installed correctly for proper unit operation. Failure to install and/or prime traps will cause flue gasses to enter the space and may cause unit malfunction.

IMPORTANT

1. The use of this manual is specifically intended for a qualified installation and service agency. All installation and service of these kits must be performed by a qualified installation and service agency.
2. These instructions must also be used in conjunction with the Installation and Service manual (6-563) originally shipped with the appliance being installed. These instructions supersede any accompanying component supplier literature.

Application

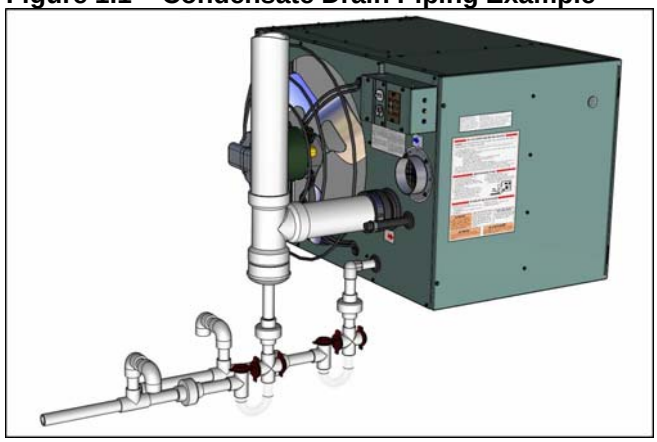
During unit heater operation, condensate is produced in the heater and venting system. The installation requires condensate drain systems from the secondary heat exchanger and from the vent pipe. This condensate trap kit provides for easy installation of the condensate drain to ensure proper unit heater operation.

Components of this kit include:
EZ Trap (2)
1/2” FIP x 3/4" Socket PVC 90° Elbow (1)

Condensate Drain and Trap Installation

1. For proper heater and vent system performance, the condensate drain system must include a trap for both the unit condensate drain and the vent system, as shown in Figure 1.1. All joints must be watertight to prevent leakage of condensate.

Figure 1.1 – Condensate Drain Piping Example

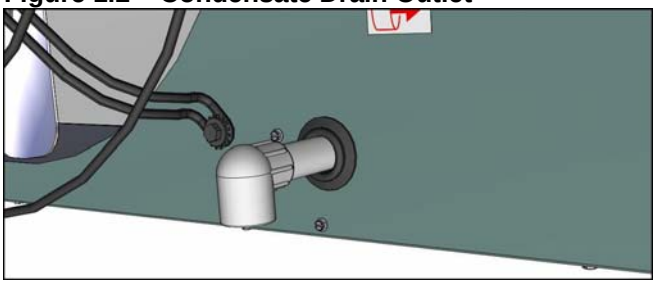


2. Local code permitting, the condensate drain systems may be joined after the traps and connected to a sanitary drain within the building. Because the condensate produced is acidic, some municipalities may require that the condensate be neutralized before being discharged into the sanitary sewer. A condensate neutralizer tube kit is available from Modine to reduce the pH of the condensate. Refer to the instructions that come with the kit for installation.

3. Unions are recommended to permit maintenance of the drains and to facilitate service of the heater. A union is shown on both sides of each trap.

4. Attach the supplied 1/2” FIP x 3/4" Socket to the Condensate Drain Outlet on the back of the unit, see Figure 1.2.

Figure 1.2 – Condensate Drain Outlet



5. Attach the supplied drain traps as shown in Figure 2.1. These traps must be primed with water before startup for safe operation of the heater. The traps must be installed with the higher side connected to the heater and the lower side connected to the drain.

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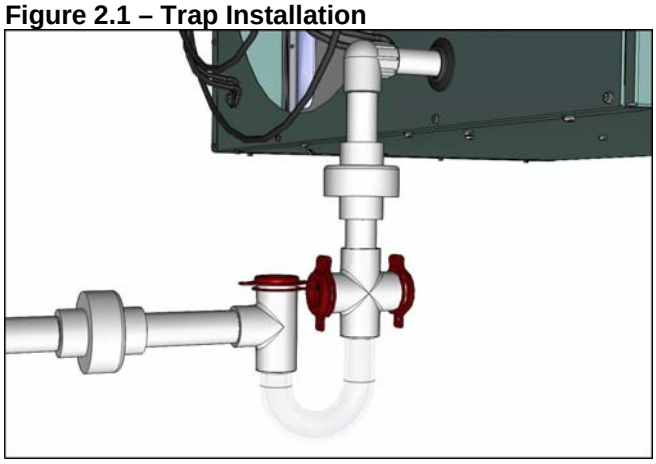
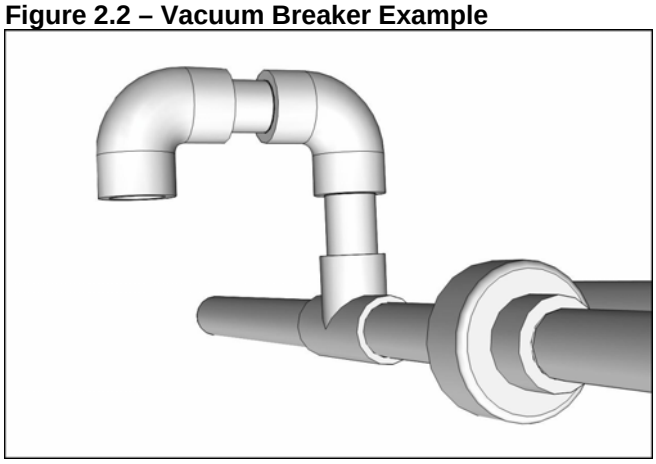
Figure 2.1 – Trap Installation



6. A vacuum breaker is required after each trap, as shown in Figure 2.2. The vacuum breaker should be constructed so that dirt and debris do not enter and clog the drain.

Figure 2.2 – Vacuum Breaker Example



7. If there is an oppportunity that the temperature in the space will fall below freezing during non-operating periods, the condensate drain systems and secondary heat exchanger must be completely drained to prevent freeze damage. Alternately, heat tape can be applied to the drain pipe system in accordance with the heat tape manufacturer's instructions.

8. Once the condensate drain lines are complete, proceed to page 13 of 6-563, the Installation and Service Manual, and continue with the following section "Installation – Gas Connections"

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